**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
**REGION III**
**1650 Arch Street**
**Philadelphia, Pennsylvania 19103-2029**

November 2, 2015

Mr. Felix Mariani
Fort Belvoir Directorate of Public Works
Environmental and Natural Resources Division
Re: Real Property Master Plan EIS
9430 Jackson Loop, Suite 200
Fort Belvoir, VA 22060-5116

Re: Final Environmental Impact Statement for Proposed Short-Term Projects and Real Property Master Plan Update for Fort Belvoir, Virginia (CEQ #20150275)

Dear Mr. Mariani:

In accordance with the National Environmental Policy Act (NEPA) of 1969, Section 309 of the Clean Air Act and the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1508), the U.S. Environmental Protection Agency (EPA) has reviewed the Final Environmental Impact Statement (FEIS) for the Proposed Short-Term Projects and Real Property Master Plan Update for Fort Belvoir, Virginia.

While the FEIS addressed EPA's comments on the Draft Environmental Impact Statement (DEIS), EPA would like to make comments and suggestions on your Environmental Justice analysis as well as greenhouse gas emissions (GHG) and climate change impacts for incorporation into documentation into the Record of Decision (ROD) and future project development. In addition, EPA would like to further elaborate on the "threshold of significance" determination. These comments and suggestions are contained in the enclosed Technical Comments document.

EPA appreciates the opportunity to have reviewed this project. If you have questions regarding these comments, the staff contact for this project is Karen DelGrosso; she can be reached at 215-814-2765 or delgrosso.karen@epa.gov.

Sincerely,

Barbara Rudnick
NEPA Team Leader
Office of Environmental Programs

Enclosure (1)

# Technical Comments

***Thresholds of Significance***

As you are aware, EPA questioned the determination of thresholds of significance used for assessing environmental resource impacts. EPA respects Fort Belvoir's professional judgment in determining the thresholds of significance. However, it is EPA's concern that the thresholds used can appear to be less significant than in actuality when comparing total resources on-site. Since some of the proposed actions are conceptual and complete assessment of resources forthcoming, Fort Belvoir is strongly encouraged to continue to find ways to avoid and minimize impacts to environmental resources even if determination falls below significance. This practice will safeguard against misuse of threshold standards and provide for upholding the integrity of environmental resources on-site and in the care of Fort Belvoir. EPA recognizes that many projects will be accompanied by additional NEPA assessments and looks forward to receiving and reviewing these documents.

***Environmental Justice***

The methodology used for the Environmental Justice (EJ) assessment is reasonable. There are concerns related to the impacts of family displacement in the project area. The movement of families by displacement may be of concern due to affordability concerns. Some of the communities may be more expensive and pose concern related to the cost of relocation. More detail would be helpful in assessing the impacts of the project on areas and communities of EJ concern.

***Green House Gas Emissions/Climate Change***

Although greenhouse gas emissions and climate change were addressed in the EIS, it is important to bring to your attention that in December 2014, the Council on Environmental Quality (CEQ) issued Revised Draft Guidance for Greenhouse Gas Emissions (GHG) and Climate Change Impacts for Federal agencies' consideration. EPA is aware that the Draft Guidance was issued after the DEIS for the proposed action was published. However, because the Draft Guidance is intended for federal agencies consideration of GHG emissions and climate change impacts for their proposed actions, it is suggested the guidance be considered during project planning and development. The guidance outlines a reasonable approach to analyze greenhouse gas emissions and climate change impacts. The guidance can be found at: http://www.whitehouse.gov/administration/eop/ceq/initiatives/nepa:/ghg-guidance.

EPA has been tasked by its Headquarters' office to ensure that NEPA documents address the concern of GHG emissions and incorporate resiliency into project design. Although Fort Belvoir has addressed GHG impacts in the EIS, EPA offers the following comments and suggestions to further refine the discussion and exemplify that which is expected in forthcoming NEPA documents. It is recommended that Fort Belvoir use the draft guidance to assist in project development and incorporate measures into the ROD, as appropriate.

We recommend that a NEPA analysis include an estimate of the GHG emissions associated with the project, qualitatively describe relevant climate change impacts, and analyze reasonable alternatives and/or practicable mitigation measures to reduce project-related GHG emissions. More specifics on those elements are provided below. In addition, we recommend that the NEPA analysis consider changes to the design of the proposal to incorporate GHG reduction measures and resilience to foreseeable climate change. Understanding that the DEIS and FEIS for the proposed action are complete, the Record of Decision would be expected to make clear whether commitments have been made to ensure implementation of design or other measures to reduce GHG emissions or to adapt to climate change impacts.

More specifically and for future consideration, the following approach would be expected in the EIS:

"Affected Environment" Section

- Include in the "Affected Environment" section of the DEIS a summary discussion of climate change and ongoing and reasonably foreseeable climate change impacts relevant to the project, based on U.S. Global Change Research Program assessments (http://www.globalchange.gov), to assist with identification of potential project impacts that may be exacerbated by climate change and to inform consideration of measures to adapt to climate change impacts. (Among other things, this will assist in identifying resilience-related changes to the proposal that should be considered).

"Environmental Consequences" Section

- Estimate the GHG emissions associated with the proposal and its alternatives. Example tools for estimating and quantifying GHG emissions can be found on CEQ's NEPA.gov website (https://ceq.doe.gov/current_developments/GHG_accounting_methods_7Jan2015.html). For actions which are likely to have less than 25,000 metric tons of Co2-e emissions/year, provide a qualitative estimate unless quantification is easily accomplished. In most cases quantification of GHG emissions involves a relatively straightforward calculation. [If appropriate: In addition to estimating emissions caused by the proposal itself, we recommend estimating the reasonably foreseeable emissions from "upstream" and "downstream" activities indirectly caused by the proposal].

- The estimated GHG emissions can serve as a reasonable proxy for climate change impacts when comparing the proposal and alternatives. In disclosing the potential impacts of the proposal and reasonable alternatives, consideration should be given to whether and to what extent the impacts may be exacerbated by expected climate change in the action area, as discussed in the "affected environment" section.

- Recognizing that climate impacts are not attributable to any single action, but are exacerbated by a series of smaller decisions, we do not recommend comparing GHG emissions from a proposed action to global emissions. As noted by the CEQ revised draft guidance, "[t]his approach does not reveal anything beyond the nature of the climate

change challenge itself: [t]he fact that diverse individual sources of emissions each make relatively small additions to global atmospheric GHG concentrations that collectively have huge impacts." We also recommend that you do not compare GHG emissions to total U.S. emissions, as this approach does not provide meaningful information for a project level analysis. Consider providing a frame of reference, such as an applicable Federal, state, tribal or local goal for GHG emission reductions, and discuss whether the emissions levels are consistent with such goals.

- Describe measures to reduce GHG emissions associated with the project, including reasonable alternatives or other practicable mitigation opportunities and disclose the estimated GHG reductions associated with such measures. The DEIS alternatives analysis should, as appropriate, consider practicable changes to the proposal to make it more resilient to anticipate climate change. Again, EPA recommends that the ROD commits to implementation of reasonable mitigation measures that would reduce or eliminate project-related GHG emissions.

***Executive Order 13693***

EPA appreciates the use of LEED standards and commitment to reach the GHG reduction goals in accordance with EO 13514. However, EPA must inform Fort Belvoir that as of March 19, 2015, President Obama signed Executive Order (EO) 13693, *Planning for Federal Sustainability in the Next Decade*. Section 16 of the EO revokes Executive Order 13514, *Federal Leadership in Environmental, Energy, and Economic Performance* of October 5, 2009 and Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management* of January 24, 2007 (as well as Presidential Memorandums specified in EO 13693, see http://www.fedcenter.gov/programs /eo13693). However, EO 13693 retains the breath of these revoked executive orders (and Presidential Memorandums) while establishing newly defined targets. Thus, the goal of EO 13693 is to maintain Federal leadership in sustainability and GHG emission reductions.

The following summarizes highlights of EO 13693:

The EO 13693 outlines a combination of more efficient Federal operations to reduce agency direct greenhouse gas emissions while fostering innovation, reducing spending and strengthening the communities in which Federal facilities operate. Agencies shall increase efficiency and improve their environmental performance. Improved environmental performance will help protect our planet for future generations and save taxpayer dollars through avoided energy costs and increased efficiency, while also making Federal facilities more resilient. To improve environmental performance and Federal sustainability, priority is placed on reducing energy use and cost, then on finding renewable or alternative energy solutions. Pursuing clean sources of energy will improve energy and water security, while ensuring that Federal facilities will continue to meet mission requirements and lead by example. Employing this strategy for the next decade calls for expanded and updated Federal environmental performance goals with a clear overarching objective of reducing GHG emissions across Federal operations and the Federal supply chain. Fort Belvoir should address EO 13693 in relation to the proposed action

within the ROD. Below is a sample of ways in which agencies are to incorporate EO 13693 into their projects. Links are provided below for more extensive information on the EO.

Federal Agencies shall, where life-cycle cost-effective, beginning in fiscal year 2016, unless otherwise specified, promote building energy conservation, efficiency, and management by reducing agency building energy intensity measured in British thermal units per gross square foot by 2.5 percent annually through the end of fiscal year 2025, relative to the baseline of the agency's building energy use in fiscal year 2015 and taking into account agency progress to date.

Federal Agencies shall, where life-cycle cost-effective, beginning in fiscal year 2016, unless otherwise specified, improve data center energy efficiency at agency facilities by:

- ensuring the agency chief information officer promotes data center energy optimization, efficiency, and performance;
- installing and monitoring advanced energy meters in all data centers by fiscal year 2018; and
- establishing a power usage effectiveness target of 1.2 to 1.4 for new data centers and less than 1.5 for existing data centers.

Federal Agencies shall, where life-cycle cost-effective, beginning in fiscal year 2016, unless otherwise specified, ensure that at a minimum, the following percentage of the total amount of building electric energy and thermal energy shall be clean energy, accounted for by renewable electric energy and alternative energy:

- not less than 10 percent in fiscal years 2016 and 2017;
- not less than 13 percent in fiscal years 2018 and 2019;
- not less than 16 percent in fiscal years 2020 and 2021;
- not less than 20 percent in fiscal years 2022 and 2023; and
- not less than 25 percent by fiscal year 2025 and each year thereafter.

Federal Agencies shall, where life-cycle cost-effective, beginning in fiscal year 2016, unless otherwise specified, improve agency water use efficiency and management, including stormwater management by:

- reducing agency potable water consumption intensity measured in gallons per gross square foot by 36 percent by fiscal year 2025 through reductions of 2 percent annually through fiscal year 2025 relative to a baseline of the agency's water consumption in fiscal year 2007
- installing water meters and collecting and utilizing building and facility water balance data to improve water conservation and management;
- reducing agency industrial, landscaping, and agricultural (ILA) water consumption measured in gallons by 2 percent annually through fiscal year 2025 relative to a baseline of the agency's ILA water consumption in fiscal year 2010; and
- installing appropriate green infrastructure features on federally owned property to help with stormwater and wastewater management.

If an agency operates a fleet of at least 20 motor vehicles, they will improve agency fleet and vehicle efficiency and management by taking actions that reduce fleet-wide per-mile greenhouse gas emissions from agency fleet vehicles, relative to a baseline of emissions in fiscal year 2014, to achieve the following percentage reductions:

- less than 4 percent by the end of fiscal year 2017;
- not less than 15 percent by the end of fiscal year 2021; and
- not less than 30 percent by the end of fiscal year 2025.

**NOTE**: This is not a comprehensive representation of all of the requirements detailed in EO 13693. Additional information will be added in the coming days/weeks.

Information relating to EO 13693 can be obtained through the following links below:

- Regulations, Guidance, and Policy
  - EO 13693
- Supporting Information and Tools
  - Databases/Software Tools
  - Libraries/Repositories
- Lessons Learned
- Training, Presentations, and Briefings

Conferences and Events